

Metallized Polypropylene (PP) - Capacitors in Cylindrical Case for DC-Link Applications

Special Features

- Very high volume/capacitance ratio
- Self-healing properties
- With cylindrical aluminium case for bus bar mounting
- Dry construction without electrolyte or oil
- No internal fuse required
- Negative capacitance change versus temperature
- Very low dielectric absorption
- According to RoHS 2002/95/EC

Typical Applications

DC capacitors with high capacitances for applications in power electronics also at non-sinusoidal voltages and currents e.g. in

- Wind power systems
- Inverters

Construction

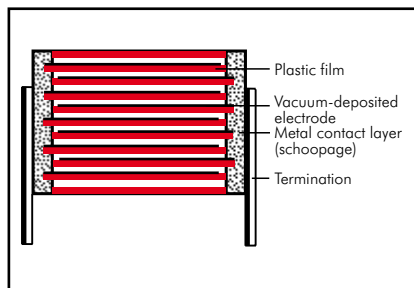
Dielectric:

Polypropylene (PP) film

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

Aluminium case with PU-sealing, UL 94 V-0

Terminations:

Screw connection M6, screw bolt M12 x 16.

Marking:

Colour: Metallic. Marking: Black on silver label.

Electrical Data

Capacitance range: 165 μF to 1560 μF

Rated voltages: 600 VDC, 700 VDC, 900 VDC, 1100 VDC, 1300 VDC, 1500 VDC

Capacitance tolerances: $\pm 20\%$, $\pm 10\%$

Operating temperature range:

-40°C to $+85^\circ\text{C}$

Insulation resistance at $+20^\circ\text{C}$:

$\geq 5000 \text{ sec (M}\Omega \times \mu\text{F)}$

(mean value: 20 000 sec)

Measuring voltage: 100 V/1 min.

Dielectric loss factor $\tan \delta_0$:

2×10^{-4}

Test voltage: $1.5 U_r$, 2sec

Dielectric absorption:

0.05 %

Reliability:

Operational life $> 100\,000$ hours at 40°C

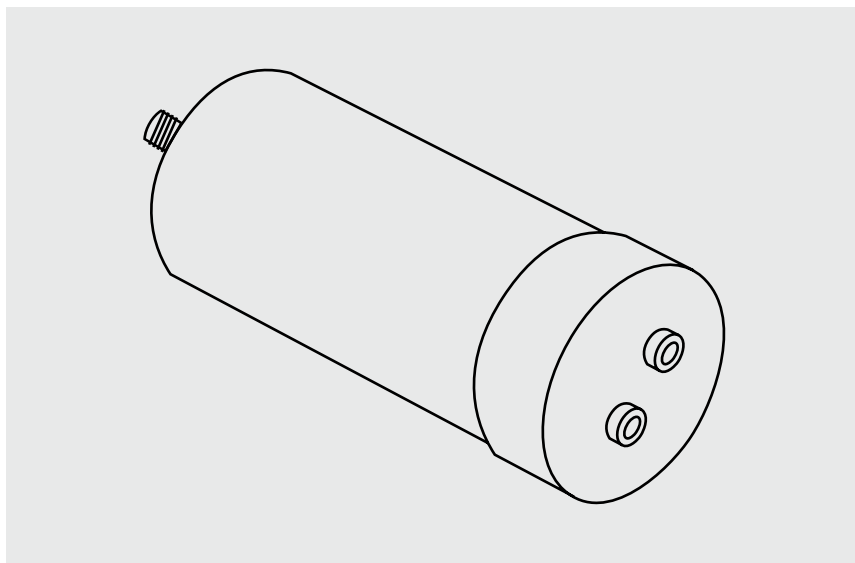
Mounting Recommendation

Excessive mechanical strain, e.g. pressure or shock onto the capacitor body, is to be avoided during mounting and usage of the capacitors.

Packing

Transportation-safe packing in cardboard boxes.

For further details and graphs please refer to Technical Information.



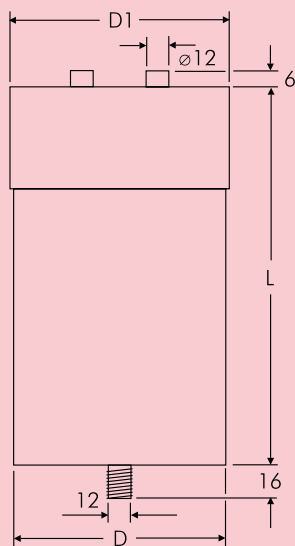
Continuation

General Data

U_R	C_N	D x L mm	I_{rms} (max.)** A	ESR (1 kHz)** m Ω	Approx. weight g	Part number
600 VDC	780 μF	85 x 120	30	1.6	700	DCP6I06780E000_
	1000 "	85 x 132	35	1.7	850	DCP6I07100E100_
	1560 "	85 x 210	60	1.3	1400	DCP6I07156E200_
700 VDC	585 μF	85 x 120	30	1.7	700	DCP6K06585E000_
	750 "	85 x 132	35	1.9	850	DCP6K06750E100_
	1170 "	85 x 210	60	1.3	1400	DCP6K07117E200_
900 VDC	480 μF	85 x 120	30	1.7	700	DCP6N06480E000_
	550 "	85 x 132	36	1.8	850	DCP6N06550E100_
	900 "	85 x 210	60	1.5	1400	DCP6N06900E200_
1100 VDC	325 μF	85 x 120	30	1.8	700	DCP6P06325E000_
	420 "	85 x 132	40	1.9	850	DCP6P06420E100_
	650 "	85 x 210	60	1.3	1400	DCP6P06650E200_
1300 VDC	215 μF	85 x 120	30	1.8	700	DCP6R26215E000_
	270 "	85 x 132	40	2.4	850	DCP6R26270E100_
	430 "	85 x 210	60	1.5	1400	DCP6R26430E200_
1500 VDC	165 μF	85 x 120	30	2.2	700	DCP6S06165E000_
	210 "	85 x 132	40	2.5	850	DCP6S06210E100_
	330 "	85 x 210	60	1.7	1400	DCP6S06330E200_

** General guide

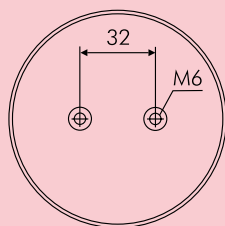
Dims. in mm.



D	D1	L
85	86	120
85	86	132
85	86	210

Part number completion:

Tolerance: 20 % = M
10 % = K
Packing: bulk = S
Pin length: none = 00



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A WIMA part number consists of 18 digits and is composed as follows:

- Field 1 - 4: Type description
- Field 5 - 6: Rated voltage
- Field 7 - 10: Capacitance
- Field 11 - 12: Size and PCM
- Field 13 - 14: Special features (e.g. Snubber versions)
- Field 15: Capacitance tolerance
- Field 16: Packing
- Field 17 - 18: Lead length (untaped)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
M	K	S	2	C	0	2	1	0	0	1	A	0	0	M	S	S	D
MKS 2				63 VDC		0.01 µF			2.5x6.5x7.2		-		20%	bulk	6 -2		
Type description:				Rated voltage:		Capacitance:			Size:		Tolerance:		Packing:				
SMD-PET = SMDT				2.5 VDC = A1		22 pF = 0022			4.8x3.3x3 Size 1812 = X1		20% = M		AMMO H16.5 340x340 = A				
SMD-PPS = SMDI				4 VDC = A2		47 pF = 0047			4.8x3.3x4 Size 1812 = X2		10% = K		AMMO H16.5 490x370 = B				
FKP 02 = FKP0				14 VDC = A3		100 pF = 0100			5.7x5.1x3.5 Size 2220 = Y1		5% = J		AMMO H18.5 340x340 = C				
MKS 02 = MKS0				28 VDC = A4		150 pF = 0150			5.7x5.1x4.5 Size 2220 = Y2		2.5% = H		AMMO H18.5 490x370 = D				
FKS 2 = FKS2				40 VDC = A5		220 pF = 0220			7.2x6.1x3 Size 2824 = T1		1% = E		REEL H16.5 360 = F				
FKP 2 = FKP2				5 VDC = A6		330 pF = 0330			7.2x6.1x5 Size 2824 = T2		...		REEL H16.5 500 = H				
MKS 2 = MKS2				50 VDC = B0		470 pF = 0470			10.2x7.6x5 Size 4030 = K1				REEL H18.5 360 = I				
MKP 2 = MKP2				63 VDC = C0		680 pF = 0680			12.7x10.2x6 Size 5040 = V1				REEL H18.5 500 = J				
FKS 3 = FKS3				100 VDC = D0		1000 pF = 1100			15.3x13.7x7 Size 6054 = Q1				ROLL H16.5 = N				
FKP 3 = FKP3				160 VDC = E0		1500 pF = 1150			2.5x7x4.6 PCM2.5 = 0B				ROLL H18.5 = O				
MKS 4 = MKS4				250 VDC = F0		2200 pF = 1220			3x7.5x4.6 PCM2.5 = 0C				BLISTER W12 180 = P				
MKP 4 = MKP4				400 VDC = G0		3300 pF = 1330			2.5x6.5x7.2 PCM5 = 1A				BLISTER W12 330 = Q				
MKP 10 = MKP1				450 VDC = H0		4700 pF = 1470			3x7.5x7.2 PCM5 = 1B				BLISTER W16 330 = R				
FKP 4 = FKP4				600 VDC = I0		6800 pF = 1680			2.5x7x10 PCM7.5 = 2A				BLISTER W24 330 = T				
FKP 1 = FKP1				630 VDC = J0		0.01 µF = 2100			3x8.5x10 PCM7.5 = 2B				Bulk Mini = M				
MKP-X2 = MKX2				700 VDC = K0		0.022 µF = 2220			3x9x13 PCM10 = 3A				Bulk Standard = S				
MKP-X2 R = MKXR				800 VDC = L0		0.047 µF = 2470			4x9x13 PCM10 = 3C				Bulk Maxi = G				
MKP-Y2 = MKY2				850 VDC = M0		0.1 µF = 3100			5x11x18 PCM15 = 4B				TPS Mini = X				
MP 3-X2 = MPX2				900 VDC = N0		0.22 µF = 3220			6x12.5x18 PCM15 = 4C				TPS Standard = Y				
MP 3-X1 = MPX1				1000 VDC = O1		0.47 µF = 3470			5x14x26.5 PCM22.5 = 5A								
MP 3-Y2 = MPY2				1100 VDC = P0		1 µF = 4100			6x15x26.5 PCM22.5 = 5B								
MP 3R-Y2 = MPRY				1200 VDC = Q0		2.2 µF = 4220			9x19x31.5 PCM27.5 = 6A								
Snubber MKP = SNMP				1250 VDC = R0		4.7 µF = 4470			11x21x31.5 PCM27.5 = 6B								
Snubber FKP = SNFP				1500 VDC = S0		10 µF = 5100			9x19x41.5 PCM37.5 = 7A								
GTO MKP = GTOM				1600 VDC = T0		22 µF = 5220			11x22x41.5 PCM37.5 = 7B								
DC-LINK MKP 4 = DCP4				2000 VDC = U0		47 µF = 5470			94x49x182 DCH_ = H0								
DC-LINK MKP 5 = DCP5				2500 VDC = V0		100 µF = 6100			94x77x182 DCH_ = H1								
DC-LINK MKP 6 = DCP6				3000 VDC = W0		220 µF = 6220			...								
DC-LINK HC = DCH_				4000 VDC = X0		1 F = A010											
SuperCap C = SCSC				6000 VDC = Y0		2.5 F = A025											
SuperCap MC = SCMC				250 VAC = 0V		50 F = A500											
SuperCap R = SCSR				275 VAC = 1V		100 F = B100											
SuperCap MR = SCMR				300 VAC = 2V		110 F = B110											
				400 VAC = 3V		600 F = B600											
				440 VAC = 4V		1200 F = C120											
				500 VAC = 5V		...											

The data on this page is not complete and serves only to explain the part number system. Part number information is listed on the pages of the respective WIMA range.